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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,067	04/24/2006	Ryuichiro Amano	DK-US065040	4109
22919 7590 08/26/2009 GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER ANDREWS, MICHAEL	
			ART UNIT	PAPER NUMBER
			2834	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,067	Applicant(s) AMANO, RYUICHIRO	
	Examiner MICHAEL ANDREWS	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/24/2006</u> . | 6) <input checked="" type="checkbox"/> Other: <u>JP2003-219593A.pdf</u> . |

DETAILED ACTION

This Office Action is responsive to the Applicant's communication filed April 24, 2006. In virtue of this communication and the preliminary amendment concurrently filed, claims 1-4 are pending in the instant application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Disclosure Objections

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1, and 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The term "in a state of being close to" in claim 1 is a relative term which renders the claim indefinite. The term "in a state of being close to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "in a vicinity of" in claims 3-4 is a relative term which renders the claim indefinite. The term "in a vicinity of" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Knoll et al. (US 2003/0102765 A1), hereinafter referred to as "Knoll".

With regard to claim 1, Knoll discloses a stator [14] of a motor [10] (see [0028], lines 1-2 and figures 1-4 for all references), comprising:

a stator core [16] having a plurality of teeth [18] (see [0028], lines 2-5);

a plurality of windings [21-26] with a part of each of the windings being wound around the teeth of the stator core to form a tooth winding portion (see [0028], lines 5-7)

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and a lead-out wire extending from a corresponding one of the tooth winding portions (The lead-out wires can be seen extending from each coil toward the center of figure 3.); and

an insulator [46] (see [0032], lines 1-4) including a plurality of lead-out guide portions [R, S, T] (see [0034], lines 1-3) with the lead-out wires being drawn out from the corresponding one of the tooth winding portions of the windings [21-26] in a state of being close to the corresponding one of the tooth winding portions (see figure 3).

With regard to claim 2, Knoll discloses the stator according to claim 1, as stated above, wherein each of the windings [21-26] being connected to a neutral wire [48] (see [0032], lines 4-8), with the tooth winding portions including a first tooth winding portion that follows the neutral wire and is wound about a first tooth of the teeth, and a second tooth winding portion that is wound about a second tooth of the teeth that is radially opposed to the first tooth with one end connected to the neutral wire (The winding arrangement and connections are clearly shown in figures 3 and 4.),

each of the windings further including a crossover wire, and a power wire; with the crossover wire extending from the first tooth winding portion toward the second tooth winding portion and with the power wire connecting the crossover wire to the second tooth winding portion (Figure 3 shows the crossover wire connecting coil 21 to 24, connected by the power wire at R. The connections are also shown schematically in figure 4.), such that a first lead-out portion (between coil [21] and [R]) is formed between the first tooth winding portion [21] and the second tooth winding portion [24] and a second lead-out portion (the other side of coil [24], leading to on of the tabs at

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neutral [48]) is formed between the second tooth winding portion and the neutral wire [48], and the first and second lead-out portions serve as the lead-out wires of the first and second tooth winding portions (Once again, these winding relationships are clearly shown in figures 3 and 4.).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll in view of Kitamura (JP 2003-219593 A).

With regard to claim 3, Knoll discloses the stator according to claim 1, as stated above, except that Knoll does not expressly disclose that each of the lead-out guide portions comprises a groove provided in a vicinity of a periphery of the corresponding one of the tooth winding portions.

Kitamura discloses a stator [10] of a motor (see [0010] and figure 5) having an insulator [30] (see [0013]) including a plurality of lead-out guide portions [60] (see [0014] and figures 3-4), each of the lead-out guide portions [60] comprising a groove provided in a vicinity of a periphery of the corresponding one of the tooth winding portions [40] (see [0014]; described as a “groove” located “by the side of a coil bore”).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the stator of Knoll by using a groove at the periphery of the tooth winding portions as taught by Kitamura, for guiding the lead-out wires thereof, since Kitamura teaches that using grooves to stow the crossover wires reduces vibrations and strain on them during assembly and operation of the motor (see [0003] and [0007]).

With regard to claim 1, Knoll discloses the stator according to claim 2, as stated above, except that Knoll does not expressly disclose that each of the lead-out guide portions comprises a groove provided in a vicinity of a periphery of a corresponding one of the first and second tooth winding portions.

Kitamura discloses a stator [10] of a motor (see [0010] and figure 5) having an insulator [30] (see [0013]) including a plurality of lead-out guide portions [60] (see [0014] and figures 3-4), each of the lead-out guide portions [60] comprising a groove provided in a vicinity of a periphery of a corresponding one of the first and second tooth winding portions [40] (see [0014]; described as a "groove" located "by the side of a coil bore").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the stator of Knoll by using a groove at the periphery of the tooth winding portions as taught by Kitamura, for guiding the lead-out wires thereof, since Kitamura teaches that using grooves to stow the crossover wires reduces vibrations and strain on them during assembly and operation of the motor (see [0003] and [0007]).

Citation of Relevant Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art:

- Futami et al. (US 2003/0020344 A1) discloses an electric motor with a plurality of windings and winding terminal receiving portions;
- Eggers et al. (US 2002/0135259 A1) discloses a stator having a plurality of teeth and windings with an insulator which supports the lead out wires;
- Suzuki et al. (US 6,177,751 B1) discloses a stator with insulators between the teeth and windings.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andrews whose telephone number is (571)270-7554. The examiner can normally be reached on Monday through Thursday between the hours of 7:30 and 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached at (571)272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quyen Leung/
Supervisory Patent Examiner, Art Unit 2834

/M. A./
Examiner, Art Unit 2834